MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2015/2016

BFN2224 – FINANCIAL MARKETS AND INSTITUTIONS

(All sections / Groups)

30 May 2016
9:00 a.m. – 11:00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **THREE** printed pages with **FOUR QUESTIONS** only
2. Answer **ALL** questions in the answer booklet provided.
3. Marks allocations are shown at the end of each question.

QUESTION 1 (25 MARKS):

a. Consider a bond that promises the following cash flows. The required discount rate is 10%.

Year	1	2	3	4	5
Payments (RM)	200.00	300.00	350.00	400.00	450.00

You plan to buy this bond, hold it for 3½ years, and then sell the bond.

(i) What total cash will you receive from the bond after the 3½ years? Assume that periodic cash flows are reinvested at 10%?

(5 marks)

(ii) If immediately after buying this bond, all market interest rates increase to 11% (including your reinvestment rate), what will be the impact on your total cash flow after 3½ years? How does this compare to part (i)?

(5 marks)

(iii) Assuming all market interest rates are 10%, what is the duration of this bond?

(10 marks)

b. Investors with risk-loving characteristics will purchase securities with higher expected returns, lesser risks, and more liquidity. Do you agree with this statement? Discuss.

(5 marks)

QUESTION 2 (25 MARKS):

a. Consider the following security information for four securities making up an index:

Security	Price (RM)		Shares
	time = 0	time = 1	Outstanding (million)
A	10	15	30
B	30	33	100
C	25	28	80
D	42	48	40

What is the change in the value of the index from time = 0 to time t = 1 if the index is calculated using a value-weighted arithmetic mean?

(9 marks)

Continued...

b. Mariam owns a RM1,000-par zero-coupon bond that has ten years of remaining maturity. She plans on selling the bond in one year and believes that the required yield next year will have the following probability distribution:

Probability	Required Yield (%)
0.2	7
0.2	7.2
0.2	7.4
0.15	7.6
0.15	7.8
0.1	8

(i) What is the expected price of the bond at the time of sale?

(8 marks)

(ii) What is the standard deviation of the bond price?

(8 marks)

QUESTION 3 (25 MARKS):

a. "Bank bailouts built the momentum of the global financial crisis". Discuss.

(15 marks)

b. How does a general increase in uncertainty as a result of a failure of a major financial institution lead to an increase in adverse selection and moral hazard problems?

(10 marks)

QUESTION 4 (25 MARKS):

a. If the required reserve ratio is 20%, how much of a new RM50,000 deposit can a bank lend? What is the potential impact on the money supply? Recall from introductory macroeconomics that the money multiplier = 1/(required reserve ratio).

(10 marks)

Continued...

b. In a Treasury auction of RM 3.5 billion par value 91-day T-bills, the following bids were submitted:

Bidder	Bid Amount	Price
1	RM1.5 billion	RM0.9915
2	RM0.7billion	RM0.9900
3	RM1.1 billion	RM0.9945
4	RM2 billion	RM0.9931
5	RM0.8 billion	RM0.9929

(i) If only these competitive bids are received, who will receive T-bills, in what quantity, and at what price?

(5 marks)

(ii) If the Treasury also received RM1 billion in non-competitive bids, who will receive T-bills, in what quantity, and at what price?

(5 marks)

(iii) Redo question (ii) if the Treasury only received RM0.2 billion in non-competitive bids.

(5 marks)

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